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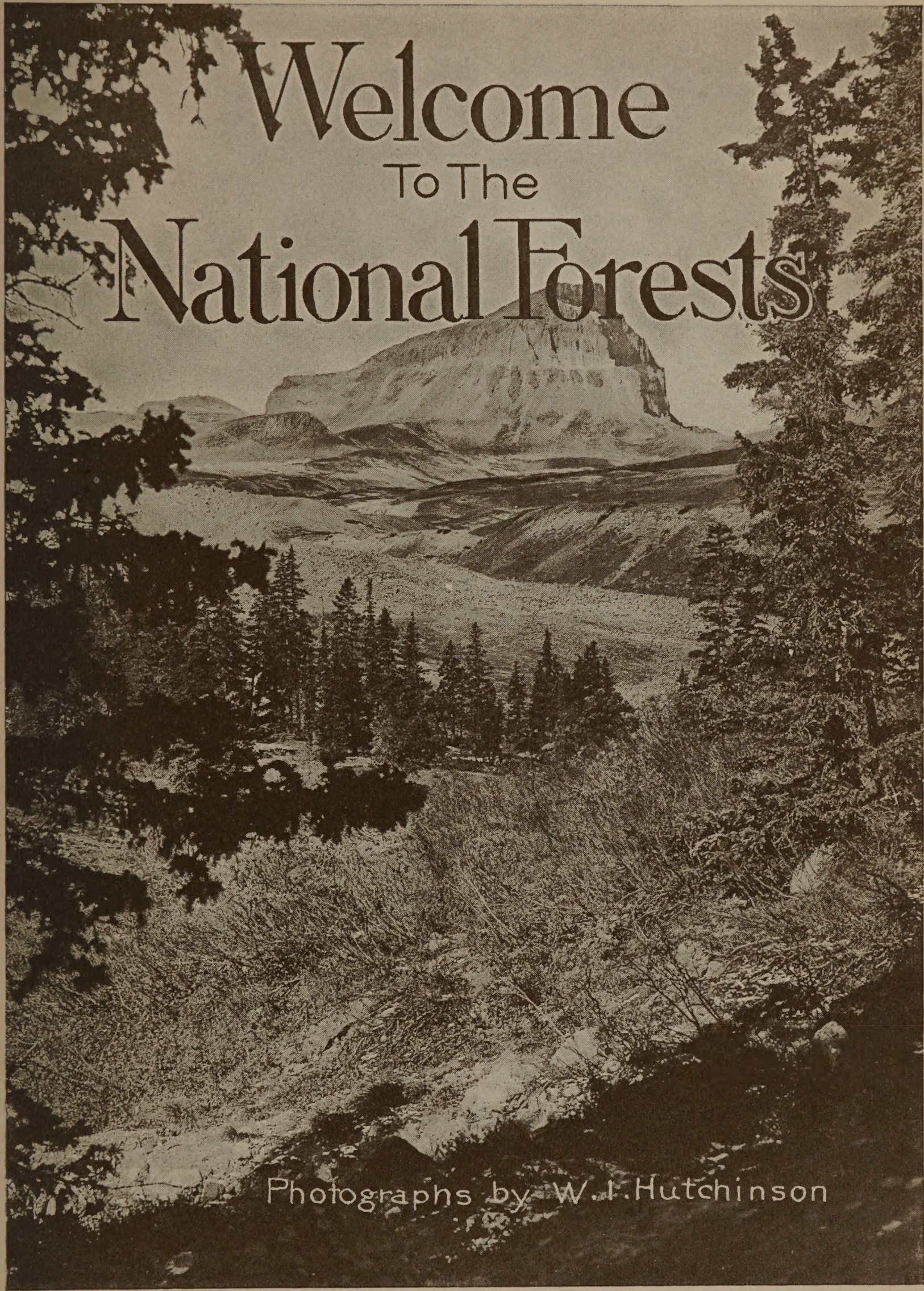
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VACATION DAYS IN COLORADO'S NATIONAL FORESTS

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Welcome To The National Forests

Photographs by W.I. Hutchinson

UNITED STATES DEPARTMENT OF AGRICULTURE
DEPARTMENT CIRCULAR

Contribution from the Forest Service
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DIRECTORY OF NATIONAL FORESTS IN COLORADO

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NATIONAL FOREST.	HEADQUARTERS.
Arapaho	Hot Sulphur Springs, Colo.
Battlement	Grand Junction, Colo.
Cochetopa	Saguache, Colo.
Colorado	Fort Collins, Colo.
Durango	Durango, Colo.
Gunnison	Gunnison, Colo.
Holy Cross	Glenwood Springs, Colo.
Leadville	Leadville, Colo.
Montezuma	Mancos, Colo.
Pike	Denver, Colo.
Rio Grande	Monte Vista, Colo.
Routt	Steamboat Springs, Colo.
San Isabel	Westcliffe, Colo.
San Juan	Pagosa Springs, Colo.
Sopris	Aspen, Colo.
Uncompahgre	Delta, Colo.
White River	Glenwood Springs, Colo.

VACATION DAYS IN COLORADO'S NATIONAL FORESTS

A NATIONAL PLAYGROUND



TO THE traveler who enters Colorado from the east the first glimpse of the distant Rockies, rising dim on the edge of the horizon across the plains, is always a stirring sight. The imagination kindles at the thought that the mighty backbone of the continent, the great divide that sets off the far West from the earlier-settled East, is close at hand. For the tourist there is the thrill that the approach to one of the wonderlands of nature gives. The mountains seem to call to something in the blood—to deep instincts that survive from the days when man lived wholly out of doors, and won life in elemental struggle with the wild. The impulse comes to leave behind the heat of the city or the life of the farm, the cares of business and the accustomed toil, and to take to the open road and push for the hills.

For those in whom stir such desires the National Forests in Colorado hold an opportunity, and an invitation. They are a playground prepared through long centuries, with room and to spare for all. To camp at the edge of timber, in meadows ablaze with wild flowers, or on the shores of lakes which by day mirror rocky cliff, verdant slope, and beetling crag, and in the darkness reflect the light of a million stars; to spend long days in the open, beside a trout stream, or tramping the ranges, or just loafing in the brilliant sunshine and the clear air of the mountain country—if your desire is for any of these things you will find them, and much besides, in these Forests. Nowhere else in the United States, and seldom in any land, may the eye look upon more majestic vistas of snow-capped mountain ranges, forested slopes, granite gorges, tumbling cascades, and rolling plains. Combined with the scenic attractions is a climate that makes one over new, an invigorating tonic of sunshine and pure air. Few other regions of equal area in America offer the seeker after rest, recreation, and outdoor life so many opportunities for enjoyment.

In Colorado are 41 of the 54 named peaks in the United States which reach an elevation exceeding 14,000 feet. Within the State's borders are 150 peaks over 13,000 feet high, 220 over 12,000 feet, and 350 over 11,000 feet. It is this great

wealth of mountains that has given Colorado its title "The Switzerland of America."

Almost without exception the higher reaches of these mountain areas are included in National Forests, of which Colorado has 17, with a net area of more than 13,000,000 acres. Within their boundaries are the most impressive scenery and the finest camping, hunting, and fishing grounds in the State. These National Forests were created primarily to insure a permanent supply of timber and to protect the water supply needed by the people of Colorado and other States for irrigation and domestic use. But they offer, besides, exceptional opportunities for almost every form of recreation. The aim of the Forest Service of the United States Department of Agriculture, which administers the Forests, is to make them national playgrounds, where the vacationist, the sportsman, and those seeking new vigor of body and mind may find rest, health, and enjoyment.

If you are the owner of an automobile you will find roads, built by the Forest Service, to take you through a great number of the most attractive areas. If you prefer the saddle, or just to tramp, there are well-built trails that will lead you to practically every beauty spot and hunting or fishing ground in the mountain country. The roads are good all the year round, for the gravelly soil is porous and well drained. New roads are being built by the Forest Service every year under an act of Congress appropriating 10 per cent of National Forest receipts for the purpose, and work has been begun on a still more comprehensive road system made possible by a special congressional appropriation, in 1916, of \$10,000,000 to be expended over a period of 10 years. Hotel and garage facilities can be found in almost all towns, both large and small; and gasoline, oil, and other motor requisites can be had even in the most out-of-the-way places. Pack outfits, and guides if desired, usually can be hired in every community, and the tramper and horseman will find many ranch houses in the Forests where accommodations can be secured for the night. Attractive camp sites without number can be found in every one of the Forests.

You will find yourself under no burdensome restrictions when you use the National Forests for recreation. Care with fire and proper camp sanitation are practically all that are asked of the visitor. You may go where you please, pitch camp wherever the fancy strikes you, and stay as long as you like. You may have what wood you need for fuel free of charge, and forage for your saddle and pack animals. If you wish to stay in the Forest for the entire season, and return year after year, you can obtain a site for a summer home at a small annual rental.

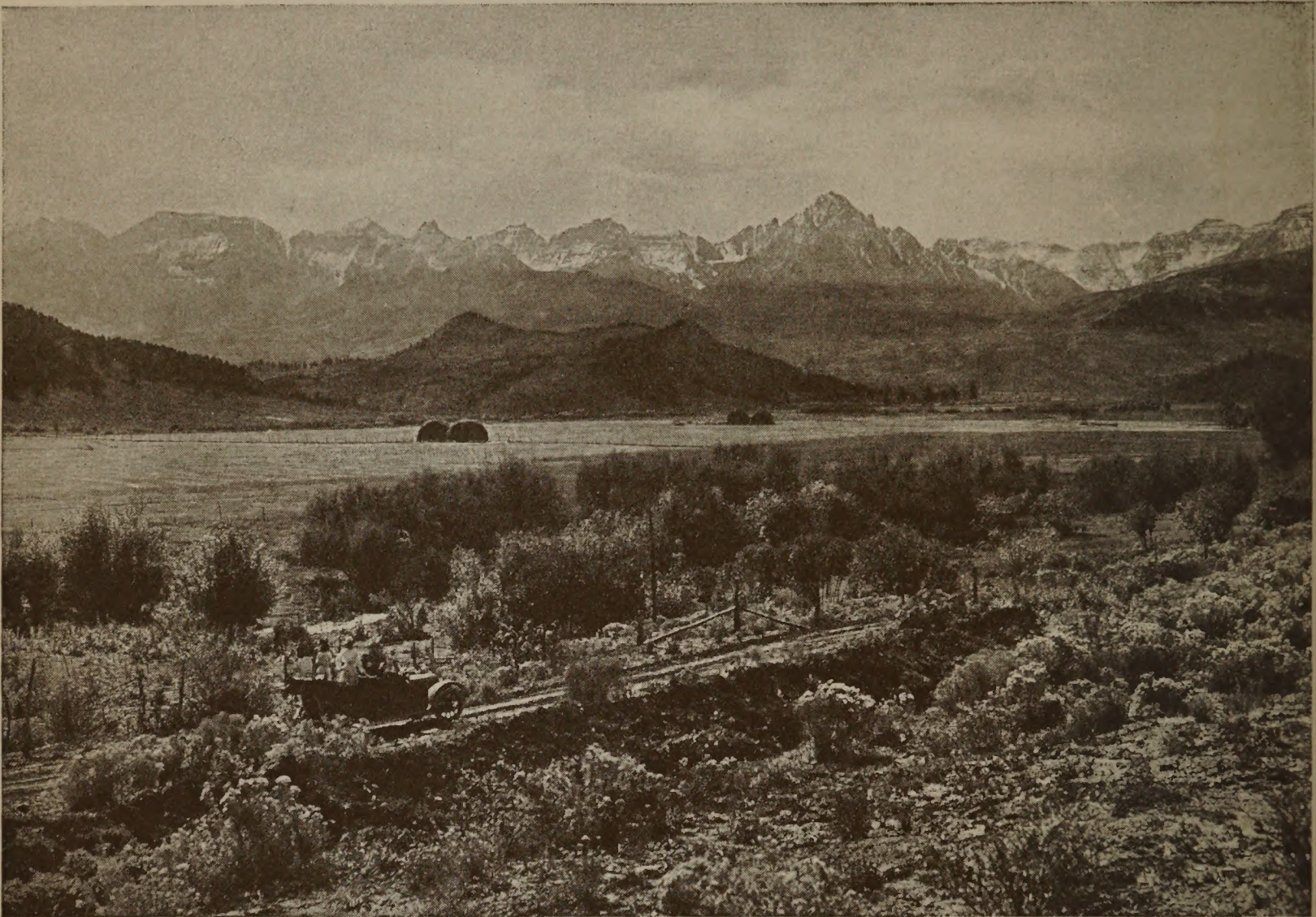
Colorado is famous for its trout fishing, and the National Forests offer the best in the State. Rainbow, native, and eastern brook—all remarkable for size and gameness—are the three varieties you will find in Colorado's 6,000 miles of

running streams and 500 lakes. Each year the Forest Service, in cooperation with the Colorado Fish and Game Commission and with private companies and individuals, plants millions of young fish, thus keeping even the most frequented waters plentifully supplied. The only thing required of the angler in the National Forests is compliance with the State game laws. This applies also to the hunter. Big game is often met with in the Forests, but at present the law forbids some species being killed. If, however, you enjoy stalking your game with a camera instead of with a gun, you will find much of interest among the wild life of the mountains. Predatory animals can always be killed, the more the better. Hunters, before going into the Forests, should be sure to provide themselves with a copy of the State game laws and the customary license.

Visitors in the National Forests seldom need to lose touch with the outside world. The extensive telephone system maintained in connection with the Forests' protection from fire is at your disposal in case of emergency. Campers' registers are kept at the various Forest headquarters, in which you may write your name and destination, thus making it possible for an officer to reach you in the event of the receipt of important messages.



National Forest roads afford fine views and easy going



In a Rocky Mountain valley

Full information regarding routes of travel, points of interest, fishing and camping grounds, and other matters of interest to visitors can be obtained from the district office at Denver or at any of the Forest headquarters listed on the inside of the front cover. Rangers and other field officers are always glad to give similar information, and in other ways help to make your stay in the Forests a pleasant one.

Destruction of the forest cover of Colorado's mountains would mean irreparable loss to the entire State and even to the Nation. If you plan to go into the Forests, you are urgently requested to read the instructions on page fifty-four of this booklet, which tell how forest fires may be prevented and how campers may avoid polluting the streams.

RECREATION IN THE NATIONAL FORESTS

In the following pages are briefly described the scenic and recreational features of the various National Forests in Colorado. The Forests are arranged according to location, beginning with those in the northern part of the State.

ROUTT NATIONAL FOREST

THE Routt National Forest lies in northwestern Colorado, in Routt, Jackson, Moffat, and Grand Counties, and includes the headwaters of the North Platte River, the largest confluent forks of Little Snake River, and important tributaries of the Yampa and Grand Rivers. To the west of the Routt are the sparsely settled plains lying between the main range of the Rocky Mountains of Colorado and the Wasatch Mountains of Utah. The Forest itself is characterized by grassy meadows scattered among the dark-green forests of firs and spruces, in which grow myriads of beautiful flowers and grasses. The summer climate is ideal, with warm days and cool nights.

Many trout streams on the Forest offer excellent angling. In the southern part, easily accessible from Kremmling and Yampa on the Denver & Salt Lake Railroad, one may, in a half day's ride over a good stage road, reach the popular waters of Rock and Blacktail Creeks. To travel beyond this point one must use saddle horses and a pack outfit, as roads are lacking and there are no ranches at which accommodations may be secured. A day's trip from the railroad, however, will place one on the headwaters of Rock, Red Dirt, Service, or Silver Creeks, all of which are noted for their good fishing.

Visitors with automobiles will find an excellent example of a Forest Service mountain road in the 18 miles of highway over Rabbit Ears Pass. Leaving Kremmling on the Grand River, the beginning of the new road is encountered some 30 miles to the northward on the "Moffat Highway," near the crest of the divide between North and Middle Parks. After a steady climb of 4 miles to the top of the pass, followed by a 5-mile run through open, grassy country, the road descends the western slope on an even grade for a distance of about 8 miles, affording wonderful glimpses of wooded slopes and the fertile meadows and fields of typical western ranches.

A horseback trip along the crest of the Continental Divide, from a point on the Rabbit Ears Pass road some 18 miles southeast of Steamboat Springs, is one of the most interesting and picturesque journeys to be had on the Routt Forest. The Divide varies from 1 to 3 miles in width and is studded with innumerable lakes set in groves of evergreen timber. Many of these bodies of water have been heavily stocked with trout by the Forest Service and afford keen sport for the angler. As the Divide is traversed to the north, the elevation rises gradually until the rugged, precipitous peaks of the Sawtooth Range prevent farther travel and compel a descent into the Elk River country on the west, or by way of the Gold Creek trail to the Middle and North Fork of Elk River.

The Routt Forest is one of the most noted winter sports regions of the West. The ski carnival, held annually in February, at Steamboat Springs, attracts large numbers of visitors as well as many of the best professional ski jumpers and enthusiasts of the country. The world's record ski jump of 203 feet was made on the Howelson Hill course at Steamboat Springs in 1917. For amateur skiers there are many interesting one-day trips, all within a radius of 10 miles of town, which offer keen sport, wonderful scenery, and fascinating "rides."

The headquarters of the Routt is at Steamboat Springs, reached by a day's journey from Denver over the Denver & Salt Lake Railroad, or by automobile via the "Midland Trail" and "Moffat Highway" over Berthoud and Rabbit Ears Passes. During the summer months the Forest can be reached over fair roads from Rawlins, Laramie, and Cheyenne, Wyo., on the north, or from Glenwood Springs or Leadville on the south. Travel in the interior of the Forest is largely restricted to wagon or pack outfit.

Satisfactory accommodations and supplies for outing trips may be obtained at Walden, Kremmling, Oak Creek, Dixon, Craig, Hahns Peak, Columbine, Yampa,



A day's catch in Rainbow Lake, Routt National Forest

and at Steamboat Springs. Hahns Peak, an old mining town located in the heart of the Forest, is a natural center for many of the trail routes to the more attractive lakes, streams, and fishing grounds of the mountains. To the north of town, Hahns Peak (10,824 feet), which can be reached by a three-hours' climb, affords a wonderful view of the surrounding country. A fire-observation station is maintained on this mountain by the Forest Service, and a man kept constantly on the lookout for fires during the summer months.

ARAPAHO NATIONAL FOREST

THIS Forest is located at the headwaters of the Grand River on the west slope of the Continental Divide, 65 miles northwest of Denver. It takes its name from the famous Arapahoe Indians, who at one time inhabited this country. The word Arapahoe means "Dog Eater" or "Big Nose."

Within and adjacent to the Arapaho Forest is found some of the most interesting mountain scenery in Colorado, while in contrast with the rugged snow-clad peaks and forested slopes is the wide expanse of natural grasslands forming North and Middle Parks. The summer climate is delightful, and there are endless opportunities for camping, fishing, mountain climbing, and many other forms of outdoor recreation.

The many large and small streams and lakes of North and Middle Parks are noted for their excellent rainbow, brook, and native trout fishing. These waters have been stocked for many years, and are constantly being replenished with young fry from Federal and State hatcheries. The best fishing on the Forest is found along the Fraser, Grand, Canadian, Michigan, and Illinois Rivers and their tributaries, which offer over 300 miles of prime fishing waters. Monarch and Grand Lakes and various other smaller bodies of water are also well stocked with game fish. Excellent accommodations are to be had at the numerous hotels and summer resorts located at Fraser, Granby, Monarch, Rand, Parshall, Scholl, and Grand Lake.

There are unlimited opportunities for camping along all the more important streams of the Forest. Many beautiful sites on the Williams Fork, Fraser, Grand, Michigan, and Illinois Rivers, and Willow Creek may be reached by automobile or wagon. Supplies may be purchased at any of the near-by towns, and there is plenty of wood and water available.

Big game may be seen on many parts of the Arapaho, but in the summer-time usually only at high elevations. Deer and elk are to be found in the divide



Far from the heat of city and plain is this tree-bordered lake below the snow peaks in the Colorado National Forest

between Michigan and Illinois Rivers, and Troublesome and Willow Creeks. The best-known range of mountain sheep in Colorado is located at the headwaters of the North Fork of the Grand River, and on Specimen Mountain and Mount Ida.

A number of the peaks of the Forest are of special interest to the mountain climber because of the wonderful view which may be obtained from their summits. Among the most important are Parkview (12,433 feet), Mount Richthofen (12,953 feet), Arapahoe Peak (13,506 feet), James Peak (13,260 feet), and Ute Peak (11,968 feet). All of these mountains may be reached by horseback and on foot over well-constructed trails.

Grand Lake, 15 miles from Granby, at an elevation of 8,369 feet, is the largest natural body of water in Colorado. The lake is $2\frac{1}{2}$ miles long and 2 miles wide, and is noted for its beauty and picturesqueness. Excellent accommodations are available, and boats, automobiles, saddle horses, and vehicles can be rented. Within easy walking distance of the lake, by trail, are Adams Falls, height 120 feet; Arapahoe Falls, height 285 feet; and Cascade Falls, height 235 feet.

Gore Canyon, near Kremmling, and Byers Canyon, just below Hot Sulphur Springs, are famous for their rugged grandeur. Through these gorges the Grand River rushes and tumbles between majestic walls of granite which often rise a sheer 2,000 feet.

The Arapaho Forest may be reached by rail over the Denver & Salt Lake Railroad, which crosses the Continental Divide at Corona (elevation 11,660 feet), or by automobile over the "Midland Trail," via Berthoud Pass (elevation 11,306 feet). It may also be entered by automobile from the north via Walden, Colo., and from the west over Rabbit Ears Pass.

COLORADO NATIONAL FOREST

THE Colorado National Forest is located along the east slope of the Continental Divide and Medicine Bow Range, in Larimer and Boulder Counties. It consists of two divisions, the larger one lying to the north of Estes and the Rocky Mountain National Parks, and drained by the Cache la Poudre and Laramie Rivers, while the smaller division is located south of these parks and is within the watersheds of St. Vrain and North, Middle, and South Boulder Creeks and their tributaries.

There is hardly a stream or lake in the Forest which does not offer fine camping grounds. Pure mountain water and wood for fuel are here in plenty. Supplies can be obtained from near-by ranches, summer resorts, and towns. Many camping spots, accessible by automobile or wagon, are to be found along the Laramie, Cache la Poudre, and Big Thompson Rivers, and in the Boulder and Beaver Creeks country.

Fishing is good througnout the Forest, and the more frequented streams and lakes are kept well stocked with trout from Federal and State hatcheries. Among the better known fishing streams are Laramie River, Joe Wright Creek, North, West, and South Forks of the Cache la Poudre, Big Thompson River, Middle and South Forks of St. Vrain Creek, and North and South Boulder Creeks. These waters are readily accessible, and offer in the aggregate over 150 miles of excellent fishing. There are also some 250 acres of lakes, with fish in the majority of the accessible ones. Hour Glass Lake in the Buckhorn region offers the best sport, and it is usually possible to catch the daily limit of 15 pounds allowed by law within an hour or two. In the southern division of the Forest, Brainard, Long, Silver, and Jasper Lakes, and Beaver and Nederland Reservoirs are the best trout waters.

Wild game is fairly plentiful on all parts of the Colorado. Deer range the lower elevations and can frequently be observed in the summer months, as may also mountain sheep in the timberline country. Some 85 head of elk, shipped in by the Forest Service from Wyoming and turned loose on the range, are thriving, and may occasionally be seen. Predatory animals, such as black and grizzly bear, mountain lions, lynx, wolves, bobcats, and fox, while not plentiful, are to be found in the more secluded parts of the mountains. Game birds worthy of mention are doves, ducks, grouse, pigeons, ptarmigan, and sage grouse.

The southern division of the Forest contains many interesting and unique scenic features, well worth a visit. The most noted mountains of the region are Arapahoe Peak (13,506 feet), Mount Audubon (13,223 feet), and James Peak (13,260 feet), all of which are readily accessible by trail. Arapahoe Peak is very rugged and precipitous, but not at all difficult to climb, and from its summit affords a view of exceptional grandeur. In the cirque on the east slope of this peak is the Arapahoe Glacier, which is the largest in Colorado, and one of the few "live" glaciers of the Rockies. This stupendous mass of snow and ice, seamed with giant crevasses, travels from 20 to 30 feet a year. From it come the waters which feed Goose, Island, and Silver Lakes.

In the Estes Park region, the Forest Service fire lookout station on Twin Sisters Mountain is well worth a visit. From the observation tower on this peak, at an elevation of 11,436 feet, one can see eastward to the Kansas and Nebraska State line and southward to Pikes Peak, while to the west are the forests and snow-capped summits of the Continental Divide.

The Medicine Bow Range, with its rugged, saw-toothed mountains, runs from Cameron Pass in a northwesterly direction into Wyoming. Clarks Peak, approximately 13,000 feet high, is the most important mountain from a scenic standpoint. The view from its summit affords a magnificent panorama of the mountains and plains lying to the west, north, and east. The whole of North Park lies spread out at one's feet, with the Park Range to the west, the Snowy Range in Wyoming to the north, and the plains of Colorado to the east.

There are many resorts and ranches in the Colorado Forest at which visitors can secure accommodation at moderate prices during the summer months. Fishing, hunting, mountain climbing, horseback riding, and outdoor sports are available to guests.

The southern division of the Colorado is reached by the Denver, Boulder & Western Railroad ("The Switzerland Trail"), which runs from Boulder to Glacier

Lake and Ward; the Denver & Salt Lake Railroad, which follows up South Boulder Creek, passing through Rollinsville and Tolland, and also by automobile from Boulder. The northern portion of the Forest is accessible from Loveland or Lyons on the Chicago, Burlington & Quincy Railroad and the Colorado & Southern Railway, or Fort Collins and Greeley on the Union Pacific Railroad. From these points good automobile roads run up the Cache la Poudre and Big Thompson Rivers, supplemented at the higher elevations by wagon roads and Forest Service trails. The "North Park Highway," from Fort Collins to Walden, follows the Cache la Poudre River and crosses the Medicine Bow Range at Cameron Pass.

WHITE RIVER NATIONAL FOREST

THE White River National Forest takes its name from White River, one of its principal drainage systems. North of this river is the Yampa or Bear River watershed, while the southern portion of the Forest, comprising the White River Plateau, drains into the Grand River.

The majority of pleasure seekers visiting the White River Forest establish a camp near some stream or lake where the fishing is good. Of the many desirable camping sites which may be reached by automobile or wagon, North and South Forks of White River, East Fork of Williams Fork, Bear River, and Derby, East Rifle, and Sweetwater Creeks are especially to be recommended. Parties desiring to travel by saddle horse with pack outfits will find many other excellent camp grounds in the higher and more secluded parts of the Forest. The best season for outdoor camping is from about June 15 to October 15.

Practically all the waters of the White River Forest are well stocked with trout. The best fishing is to be found in Trappers and Marvine Lakes, where the angler may depend upon filling his basket in short order. Trappers Lake is located about 5 miles by trail from the end of the wagon road on the North Fork of White River, while the Marvine Lakes are 7 miles from Marvine Lodge over a good trail. Other good fishing waters are Sweetwater, Lost, and Deep Lakes, the former being accessible by automobile. In addition to these lakes, the North and South Forks of White River, Bear River, East Fork of Williams Fork, Trout, Derby, Sweetwater, Elk, and East Rifle Creeks, with a combined total length of over 150 miles, are all excellent fishing streams.

Big game is abundant on the White River, and in parts of the Forest it is possible to see wild life almost any day throughout the summer season, and sometimes even to secure photographs of the animals. Elk and deer range throughout the



On the way to a camping site

mountains and plains, while mountain sheep are to be found around the rim-rock country above Lost Lakes, the heads of the Derbys, and on the breaks of the Elk Creek.

The Forest contains many points of scenic interest, which it is possible for the pleasure seeker to visit in connection with fishing and outing trips. One of the most popular scenic attractions is Trappers Lake, which is approximately $1\frac{1}{2}$ miles in length and three-quarters of a mile in width. Another interesting scenic feature is the Devil's Causeway, located on the Flat Tops about 8 miles northeast of Trappers Lake. The Causeway is a narrow knife-edge of rock, 3 or 4 feet in width and a thousand feet high, which forms the divide between the headwaters of Bear River and Williams Fork.

The southern part of the Forest is cut by deep canyons, through which the streams from the White River Plateau find their way to the Grand River. Many of these canyons offer special scenic attractions. Deep Creek Canyon, in the southeastern part of the Forest, is 15 miles in length, and in places only a quarter of a mile wide, with walls 3,000 feet high. A small box canyon on East Rifle Creek contains a large cave, known as the "Old Maid's Kitchen," of sufficient size to accommodate several teams and wagons. The canyon of the South Fork of White River is noted for its limestone cave, containing two small lakes and a running stream, which may be explored to the depth of half a mile or more.

The mountains of the White River Forest, while not of great altitude, are noted for the fine view which may be obtained from their summits. The peaks most frequented are Sleepy Cat, Pagoda (11,251 feet), Pyramid, Marvine, Derby (12,253 feet), and Shingle Peak (12,072 feet). A fire-lookout station is maintained on Sleepy Cat Mountain, where a 30-foot tower has been built on the peak for observation purposes. During dry periods in the summer a lookout man is stationed here to watch for forest fires.

The White River Forest is at a distance from the railroads, but may readily be reached by automobile or stage. Meeker, the principal town in the White River country, is accessible from the north by the "Meeker Trail" from Craig on the Denver & Salt Lake Railroad, and from the south by way of Rifle on the Denver & Rio Grande Railroad. The "Pikes Peak Ocean to Ocean Highway" from Vernal, Utah, enters Meeker from the east via Rifle, continuing west to Salt Lake City, Utah, and the "Midland Trail" also skirts the south boundary of the Forest. The headquarters of the White River National Forest is at Glenwood Springs, on the Denver & Rio Grande Railroad.



Motoring into mountain land along the Monarch Pass Road, Cochetopa National Forest

HOLY CROSS NATIONAL FOREST

THE Holy Cross National Forest takes its name from the famous Mount of the Holy Cross, which bears high on its rocky slopes a cross of snow, visible almost as far as the crest itself. The upright of the cross measures about 1,200 feet, and the beam 200 feet. The Forest covers the western flank of the Gore Range, and includes within its boundaries the watersheds of the Eagle River and its many tributaries.

Excellent camping sites are to be found along the banks of the many streams in the Forest, and around the borders of the lakes. Good fishing, pure water, plenty of fuel wood, and an endless variety of mountain scenery await the visitor. Fresh "plants" of trout fry, obtained from Government and State hatcheries, are made in the more important waters each year, so that the sportsman is always assured of a good catch.

The Eagle River from Pando to Minturn, which is paralleled by the main line of the Denver & Rio Grande Railroad, is one of the most popular fishing streams of the Forest. Homestake Creek, which empties into the Eagle River near Red Cliff, is another well-known trout stream. A good wagon road extends up this creek 12 miles to Gold Park. About 4 miles above Gold Park is Homestake Lake, reached by trail, which has been stocked with eastern brook trout by the Forest Service. Many fine catches have been made in this lake, the fish averaging three-quarters of a pound in weight and over 12 inches in length.

About halfway between Red Cliff and Gold Park a trail branches off the main wagon road and leads to Mount Whitney Lake, 5 miles distant, where there is excellent fishing. Piney and Black Lakes are also noted fishing waters. The former supports native trout, and is reached by trail from Minturn. Black Lake, at the head of Black Gore Creek, contains only eastern brook varieties. It is reached by trail from either Minturn or Red Cliff on the Denver & Rio Grande Railroad.

In addition to the waters mentioned, Piney River and Gore, Cross, Brush, and Gypsum Creeks also furnish good fishing.

The most attractive scenic feature of the Holy Cross Forest is Hanging Lake, located on Dead Horse Creek about 12 miles by automobile road and 1 mile by trail from Glenwood Springs. This lake is unique in that it lies on the edge of a cliff or precipice over which the water flows, the rim of the lake having been built up by mineral deposits from the feeding springs. In addition to the lake, there are beautiful cascades and terraces and perpendicular canyon walls hundreds of feet in height. The waters of Bridal Veil Falls make a sheer descent of 80 feet, spreading out into a thin filmy sheet suggesting a veil.

Piney Lake is another of the scenic attractions of the Forest. Set in a frame of evergreen spruce and pine woods, with picturesque canyons and falls near by, and with the snowy peaks of the Sawtooth Range in the background, it forms one of the beauty spots of the West.

The Mount of the Holy Cross (elevation, 13,978 feet), although widely known for its majestic beauty, has been little visited on account of its inaccessibility. In 1916, however, the Forest Service constructed a new trail up the side of the mountain, so that it is now possible to ride on horseback to within a mile of the summit. The starting point of this trip is Red Cliff, and the intervening distance to the peak, 12 miles, can be covered in from five to six hours under favorable weather conditions. Near the foot of the peak, where the trail leaves Cross Creek, a shelter cabin has been constructed by the Forest Service for the convenience of visitors essaying the climb. The trip from the cabin to the summit may be made on foot in from two to three hours. The vast panorama of snow-clad mountain peaks, evergreen forests, and rolling valleys which greets the eye after this arduous ascent is one of impressive grandeur.

Another noted mountain of the Holy Cross Forest is Castle Peak (elevation, 11,434 feet), so called because of its peculiar formation, which may be likened to the battlements of an ancient castle. This promontory is within 10 miles of the town of Eagle, and is plainly visible to the north from the train. On one of the main spires a fire-lookout station has been established by the Forest Service and connected by telephone with Eagle and other important towns of the Forest. As there are no other mountains of equal elevation within a radius of 15 miles of the peak it affords an unusually striking view in all directions.

The headquarters of the Forest is at Glenwood Springs, one of the noted summer resorts of Colorado. Here one may enjoy picturesque mountain scenery, restorative mineral baths, riding, tennis, polo, golf, swimming, fishing, and hunting. The famous Yampah Spring, which flows 2,889 gallons of hot mineral water per minute, is located in the heart of the town. Excellent accommodations are available in Glenwood Springs, and also at many of the smaller towns and resorts scattered throughout the Forest. Liberal stop-over privileges on all railroad tickets may be obtained upon request.

The Holy Cross Forest is readily accessible both by rail and automobile. The main line of the Denver & Rio Grande Railroad traverses it from east to west. By automobile, it may be entered from the northeast by the "Midland Trail" and from the southeast over the "Pikes Peak Ocean to Ocean Highway." Roads, many of which are passable in a machine, follow up the main tributaries of the Eagle River. In the high country these roads give way to trails constructed by the Forest Service.



Road maps are placed at convenient points in the National Forests for the guidance of visitors

LEADVILLE NATIONAL FOREST

THE Leadville National Forest, so called on account of its proximity to the famous mining camp of Leadville, lies along the Continental Divide to the west of South Park. Besides the main Divide, the Mosquito, Gore, and Williams Fork Ranges intensify its extremely rugged topography. The principal drainage systems are those of the Arkansas and South Platte Rivers, which take their rise near Tennessee and Hoosier Passes and flow into the Gulf of Mexico, and of the Blue River, which heads upon the west side of Hoosier Pass and flows westward into the Pacific.

The summer climate, with its fine warm days and cool, invigorating nights, is ideal for outdoor life. Many fine camping sites may be found within a few miles of the railroad, or immediately adjacent to automobile highways and wagon roads. Localities which hold special attractions for the camper are the Cottonwood Lakes and Chalk Creek Canyon, to the west and southwest of Buena Vista, respectively; the famous Twin Lakes, near Granite, and Turquoise Lake, west of Leadville. Equally beautiful camping grounds are found in the more secluded parts of the mountains, but are accessible only with saddle and pack animals.

Excellent sport awaits the angler in the many trout streams of the Forest. The most accessible waters are those of the Arkansas and South Platte Rivers, reached by good roads and trails. Accommodations may be secured at near-by ranches and resorts. The Blue River and its many tributaries are also well stocked with trout, but are more difficult of access. In addition to the streams mentioned, there are a large number of lakes which abound in game fish, among them Cottonwood, Rainbow, Twin, Turquoise, and Uneva Lakes, and some dozen smaller bodies of water within the Blue River watershed.

Mountain lions, wolves, lynx, and bear are to be found in the Blue River country. Deer are widely scattered throughout the Forest, and may frequently be observed during the summer. Mountain sheep are largely confined to the high timberline country immediately west of the Arkansas River, but a trip 8 or 10 miles west of the main traveled highway will often permit of a view of these animals in their native haunts.

The mountain climber and lover of mountain scenery will find exceptional opportunities in the Leadville Forest to visit the beacon peaks of the Rockies. Mounts Elbert and Massive, both listed by the United States Geological Survey as 14,402 feet high, the loftiest peaks in Colorado, are readily accessible by trail. The Collegiate Range, immediately west of Buena Vista, made up of Mounts Yale (14,187 feet), Princeton (14,196 feet), and Harvard (14,375 feet), afford magnificent views, and are all easily reached on foot and horseback.

Leadville, where the headquarters of the Forest is located, is accessible by three lines of railroad. The Colorado & Southern Railway (South Park Division) from Denver crosses the Continental Divide at Boreas Pass, continues northward down the Blue River to Dillon, and then south along Ten Mile Creek to Leadville. The main lines of the Colorado Midland Railway¹ from Colorado Springs, and the Denver & Rio Grande Railroad from Pueblo, enter the southern part of the Forest and follow the Arkansas River Valley to Leadville, thence across the Continental Divide to western Colorado. The "Pikes Peak Ocean to Ocean Highway" from Colorado Springs passes through Buena Vista and Leadville, and continues northwest to Wolcott, on the "Midland Trail." Buena Vista is also connected by auto road with Salida, on the "Rainbow Route." The northern part of the Leadville Forest is reached via Denver over the "South Park Highway" to Fairplay, thence over the Continental Divide at Hoosier Pass to Breckenridge, and down the Williams Fork to Kremmling, on the "Midland Trail." Branch highways in various parts of the Forest can also be traversed by machines. Good roads follow up many of the rivers and creeks, but travel in the high mountain country must be done by trail.

¹ The Colorado Midland Railway, which traverses the Pike, Leadville, and Holy Cross National Forests, ceased operation in August, 1918. The renewal of train service on this line is problematic.



A ranger station in the Pike National Forest, on the "Pikes Peak Ocean to Ocean Highway"

PIKE NATIONAL FOREST

THE Pike National Forest, which takes its name from the world-renowned Pikes Peak, is visited by several hundred thousand health and pleasure seekers each summer. It lies along the eastern slopes of the Continental Divide west of Denver, and extends from Clear Creek on the north to the gold camp of Cripple Creek in the Pikes Peak region on the south. The northern and central parts of the Forest drain into the South Platte River, while the southern portion is within the watershed of the Arkansas River.

Camping out is one of the most popular ways of spending a summer vacation on the Pike. The dependable climate, the excellent roads and trails leading through the mountains, the wonderful scenery, fishing, and other outdoor attractions, make camping a pure delight. Throughout the entire Forest are any number of beautiful sites where the traveler may pitch his tent. The more secluded spots are accessible only by wagon or pack train, but a great number and variety of attractive sites can be reached by automobile. Automobile outings are becoming

more popular each year, and it is now a common sight to see the camper, with his bedding and cooking outfit strapped snugly to his machine, merrily chugging his way into some fastness of the hills. The visitor who does not care to "rough it" can find every comfort and convenience at the many summer resorts and ranches within and adjacent to the Forest.

The best camping grounds are to be found in the vicinity of Clear Creek, Bear Creek, and the Mount Evans country, along the North and South Forks of the South Platte River, in Lost Park, and in the canyons and by the many streams of the Pikes Peak region. The most popular mountain resort centers are in the Idaho Springs-Georgetown district, along both forks of the South Platte River, and in Ute Pass. Denver, Colorado Springs, and Manitou are the principal outfitting points for these regions.

Fine fishing streams and lakes tempt the angler on the Pike Forest. These are kept well stocked with native, eastern brook, and rainbow trout. Many good fishing grounds are accessible by railroad or automobile, and to accommodate the devotees of the sport special fishermen's trains are run by the railroads during the summer season. The most noted fishing waters are upper Clear Creek, Bear Creek, North and South Forks of the South Platte River, and Lost Park, Goose, Wigwam, Beaver, and Four Mile Creeks. These streams alone offer over 250 miles of excellent fishing. Among the lakes noted for their fine catches of trout are Naylor, Chicago, Duck, Bear Track, Lost, and Jefferson Lakes, all in the northern part of the Forest.

The Pike Forest is unrivaled for its scenery and opportunities for mountain climbing. It includes 6 peaks over 14,000 feet high, 12 peaks over 12,000 feet, and more than 20 peaks over 10,000 feet. Of these, Pikes Peak, 14,109 feet high, is probably the best known mountain in America. Grays and Torreys Peaks, 14,341 and 14,336 feet high, respectively, and Mount Evans, elevation 14,260 feet, are the three mountains most frequented by climbers. Pikes Peak may be ascended on foot, by cog road, or by automobile over a newly-constructed scenic highway. There are also over 30 inexpensive and delightful one-day trips which may be made into the Pike Forest by rail or automobile from Denver and Colorado Springs.

Wild game is fairly abundant in the Forest, and under favorable conditions may often be seen in the summertime, especially at high altitudes. It is estimated that within the boundaries of the Pike there are over 1,100 mountain sheep, 1,700

black-tailed deer, 25 antelope, and 1,600 or more beaver. Two shipments of elk, totaling 75 head, have also been made by the Forest Service to Idaho Springs and the Pikes Peak region. There are five different species of squirrels on the Forest, and numerous grouse, ducks, ptarmigan, and other varieties of game birds. Black and brown bear, mountain lions, and bobcats also inhabit the rougher and more secluded parts of the mountains.

Mountain sheep may be seen only in the high timberline country of the Continental Divide, Tarryall Range, and Pikes Peak region. Antelope are confined to the Black Mountain country near the southern end of South Park. Deer, however, range the entire Forest, and beaver are found along practically all the more important creeks.

The Pike Forest may be entered from Denver and Colorado Springs by the Colorado & Southern Railway (South Park, Georgetown, and Central City Divisions), Colorado Midland Railway, and the Colorado Springs & Cripple Creek



Lake Cheesman, in the Pike National Forest, from which Denver obtains its water supply



Picnickers indulging in holiday sports in the Pike National Forest

Railroad ("Cripple Creek Short Line").¹ The Midland Terminal Railway, from Cripple Creek to Divide, and the Manitou & Pikes Peak Railway ("The Cog Road") to the top of Pikes Peak are also within the Forest; while the Santa Fe, Denver & Rio Grande, and Colorado & Southern parallel the eastern boundary from Denver to Colorado Springs.

Two transcontinental automobile highways traverse the Pike Forest—the "Midland Trail," which runs westward from Denver and crosses the Continental Divide at Berthoud Pass, and the "Pikes Peak Ocean to Ocean Highway" from Colorado Springs to the west via Ute Pass. Other roads worthy of mention are the Sedalia-Cripple Creek "Cut-off," the "South Park Highway," and the Denver Mountain Parks road system. The unique feature of the Forest is that the greater number of its many outdoor attractions are readily accessible by automobile or train, while even the most remote and out-of-the-way spots are reached without difficulty by wagon or pack outfit.

¹ The "Cripple Creek Short Line" was not in operation during the summer of 1918. It is expected that train schedules will be resumed in 1919.

BATTLEMENT NATIONAL FOREST

THE Battlement National Forest includes the picturesque Grand and Battlement Mesa region of west-central Colorado. It lies off the general line of railroads traversing the western part of the State, but may be reached by stage, wagon, or automobile from De Beque, Grand Junction, Delta, Glenwood Springs, and other points along the Grand and Gunnison Rivers.

The Grand Mesa abounds in beautiful lakes set in basins formed by volcanic eruptions and surrounded by forests of coniferous timber. These lakes offer particular attractions for the pleasure seeker on account of their accessibility, the fine camping grounds surrounding them, and the excellent trout fishing which they afford. The most noted are Island, Eggleston, Ward, Alexander, Cottonwood, and Mesa Lakes, all of which may be reached by wagon or automobile. A summer resort is operated by a private company in the immediate vicinity of Alexander Lake.

Excellent camping grounds are to be found along all the principal streams of the Forest, and firewood, forage for stock, and pure water can be had in abundance. The more secluded camping places at the headwaters of the various creeks may be reached by saddle and pack horses. Good fishing is always to be found in these localities, and occasionally big game is encountered.

The trout streams and lakes of the Battlement Forest afford excellent fishing during the entire summer season. Native and rainbow trout are plentiful in Mesa, Cottonwood, Big, Surface, East Muddy, and Buzzard Creeks, all of which may be easily reached by wagon from any of the valley towns.

Elk and deer abound in the eastern portion of the Battlement. These animals range in the low country during the winter months, but may be seen in summer only in the high timbered regions. There are also a few bear, mountain lion, bobcats, and lynx. A small band of mountain sheep ranges the Battlement Mesa. The big-game country is accessible by wagon road or pack trails from New Castle, Rifle, or Paonia.

The most noted mountain is Leon Peak, 10,954 feet in altitude, on the Grand Mesa. The Forest Service has a fire-lookout station on this summit, from which a wonderful panoramic view may be obtained. The surroundings of the peak also includes charming pictures of lakes, reservoirs, and streams, and extensive bodies of coniferous timber interspersed with open, grassy parks. Leon Peak can be reached on horseback from Collbran, distant 18 miles.



Trails built by the Forest Service lead the horseman and trampler to the farthest and often most beautiful portions of the National Forests

A good system of automobile roads connects Collbran, where the Forest headquarters is located, with New Castle, Delta, Grand Junction, and De Beque, all of which are on the Denver & Rio Grande Railroad. The De Beque-Glenwood Springs road, which is a part of the "Midland Trail," is excellent, as is also the auto road along the Gunnison River from Grand Junction to Paonia via the "Rainbow Route." Rough wagon roads traverse the principal streams of the, Grand and Battlement Mesas. In the high country these roads give way to trails built and maintained by the Forest Service.

SOPRIS NATIONAL FOREST

THE Sopris Forest is located on the west slope of the Continental Divide in Pitkin and Eagle Counties and includes within its boundaries the watersheds of the Crystal, Roaring Fork, and Frying Pan Rivers and their many tributaries. The Forest takes its name from Mount Sopris, which rises to a height of 12,823 feet.

Good camping grounds are to be found in the vicinity of every stream and lake on the Sopris. In localities most frequented by visitors, permanent camp sites have been established, the grounds cleared and small fireplaces built by officers of the Forest Service. There are also five cabins in the more remote parts of the Forest which are open for the temporary use of the traveling public. The mountainous country in the vicinity of Aspen on Hunter, Roaring Fork, Castle, and Maroon Creeks, and their tributaries, which branch out to the east and south in the form of a huge fan, offer more and better camp sites than any other part of the Forest. Fuel, water, and supplies are easy to obtain.

The fishing in the streams and lakes of the Sopris Forest is unexcelled in Colorado. Within its boundaries are some 400 miles of rivers and creeks well stocked with trout. Hundreds of anglers visit the region each summer, and to keep the fishing good the Forest Service, in cooperation with State officials, has been "planting" approximately 500,000 trout fry each year.

The Frying Pan River, with its tributaries, probably affords more sport to fishermen than any other stream, as it is readily accessible by railroad, the Colorado Midland running along it for approximately 40 miles. The Roaring Fork and Crystal Rivers are excellent fishing streams where large catches are frequent. Snowmass Creek and Snowmass Lake, together with a large number of other lakes at and above timberline, accessible only by pack outfit, offer keen sport to the

angler; the long journey necessary to reach these waters is usually rewarded by good catches.

Deer, elk, mountain sheep, and bear inhabit many parts of the Forest. An excellent breeding ground for elk and deer has been set aside at the head of Rocky Fork and Woody Creeks as a game preserve, and these animals may be seen in this vicinity at almost any time during the summer. Mountain sheep range the country near Redstone and along the lower Frying Pan River, while bear are occasionally found in the vicinity of Avalanche Creek.

The elk on the Sopris have all been introduced into the country by the Forest Service. A total of 65 head were turned loose on the Forest from 1913 to 1915, and appear to be thriving. Recently a band of 18 head of cow elk with 10 young calves was seen on Spruce Creek.

There are numerous picturesque waterfalls on Crystal, Avalanche, Conundrum, and Fall Creeks, but the most beautiful one on the Forest is on Ivanhoe Creek, a short distance below Hell Gate. This is a series of five falls distributed within a distance of half a mile in a narrow, walled-in canyon, cut out of glistening granite.

Of the many beautiful lakes on the Sopris, the most noted is Snowmass Lake, 2 miles long and a half mile wide. It is located in a wonderfully picturesque timberline country. American, Blue, Taylor, Lost Man, Savage, and Loch Ivanhoe Lakes, which vary in size from 40 to 100 or more acres, are also much frequented by visitors.

The many peaks of the Sopris offer the mountain climber exceptional opportunities for a test of skill and endurance. The two mountains most difficult of ascent are Capitol, 13,997 feet, and Snowmass, 13,970 feet in elevation. The summit of Mount Sopris, 12,823 feet, which is the best known peak in this part of the State, may be reached on horseback. Other noted mountains are Castle (14,259 feet), Pyramid (13,885 feet), and Maroon (14,126 feet).

The canyon of the Roaring Fork above Aspen is noted for its scenic beauty, while a few miles east of town on the Independence Pass automobile road is found the "Devil's Punch Bowl," which has been worn out of solid granite by the action of water. Nearby are the celebrated "Grottoes" which have been formed by the same agency.

The canyons and cliffs of the Crystal River Valley present some unusual scenic features, and at the town of Marble an opportunity is afforded to view the largest known deposit of white marble in the world, from which was obtained

material for the Lincoln Memorial at Washington, D. C., the Federal Building at Denver, and the Union Station at Omaha, Nebr.

There are numerous summer resorts on the Sopris, the best known being located at Woods Lake, 8 miles from Thomasville, at Nast on the Frying Pan, Quinn's Spur, Redstone, and Aspen. Hunting, fishing, mountain climbing, and many other outdoor sports are available to the guests of these resorts.

The headquarters of the Sopris Forest is located at Aspen, which can be reached from Glenwood Springs, 40 miles distant, either by the Denver & Rio Grande Railroad or by the Colorado Midland Railway. The main line of the Colorado Midland also traverses the northern part of the Forest, crossing the Continental Divide at Hagerman Pass, at an elevation of approximately 11,000 feet, and continuing westward down the Frying Pan to Glenwood Springs. In the western part of the Forest the Crystal River and San Juan Railroads connect Carbondale, a junction point on the Rio Grande and Colorado Midland, with the town of Marble.

A good automobile road runs from Glenwood Springs, on the "Midland Trail," to Aspen, with a branch road at Carbondale leading up the Crystal River and Rock Creek to Redstone. Wagon roads also traverse the more important streams of the Forest, giving way in the higher country to well-built Government trails which lead into the rougher and more secluded parts of the mountains.

GUNNISON NATIONAL FOREST

THE Gunnison National Forest is located largely in Gunnison County, to the west of the Collegiate Range and south of the Elk Range and Ragged Mountains. The principal watersheds are those of Taylor Creek and the main Gunnison River and its northern tributaries. The Forest takes its name from this latter river.

Good camping grounds may be found in almost any part of the Gunnison Forest, as it is all well watered and has an abundance of forage for stock and dead timber for fuel. Very few camping spots, however, are accessible by automobile, travel usually being in wagons or with a pack outfit. The best locations are to be found in the Black Mesa country, along the creeks to the east of Somerset, and in the southeastern part of the Forest near Pitkin.

The Gunnison is noted for its fine trout streams, and is a favorite summer headquarters for fishermen. Rainbow, eastern brook, and native trout are the

principal game fish; the waters in which they are found are kept well stocked by annual "plants" of young fry. Of the many ideal fishing waters, the Gunnison, Taylor, and East Rivers, and Spring, Cement, Anthracite, Ohio, Sun, Willow, West Elk, and Sapinero Creeks, are especially deserving of mention. Over 200 miles of excellent angling may be had along these streams.

Wild life may be seen on many parts of the Forest, but considerable experience and patience in "stalking" is required in order to get close to the animals. In



Winter sports in the National Forests. A halt at the creek

the higher, more secluded parts of the mountains, elk, deer, and bear are to be found in the summertime. Mountain sheep range along the Divide at the head of Illinois Gulch, Stanford Creek, and Taylor and Union Canyons, and also along Storm Ridge and Little Robinson Creek.

The Black Canyon of the Gunnison, which skirts the southwestern part of the Forest, is one of the most picturesque gorges in Colorado. Its strikingly colored canyon walls tower for many hundreds of feet on either side of the river, opening here and there to display rifts and parks, and distant snow-clad peaks. Curecanti Needle, a tremendous spire of rock projecting to a great height, and Chipeta Falls with its rolling, leaping

cascades, are some of the interesting features of the canyon. Cimarron, Taylor, and Union Canyons are also noted for their wild scenery and rugged grandeur.

Mount Fairview, the highest peak on the Forest, affords from its summit a magnificent panoramic view of mountains, forests, and plains. The round trip to the summit may be made on horseback from Pitkin in a day. On this peak is a Forest Service lookout, where a man is stationed during dry periods in the summer to watch for fires. Other mountains which are accessible by trail and from which fine views may be obtained are Ohio Peak (12,251 feet), Ruby Peak (12,749 feet), Mount Gunnison (12,688 feet), Coal Mountain, and numerous promontories of the Ragged and Mendicant Ranges.



Rare sport awaits the angler in the National Forests

The Gunnison Forest is traversed along its southern border by the Marshall Pass division of the Denver & Rio Grande Railroad, with branch lines running northward from Parlin and Gunnison. The Forest may be entered by automobile from the east via Salida over the "Rainbow Route" across Cochetopa Pass or by way of Monarch Pass. Auto roads also extend from Gunnison to Pitkin and Crested Butte; and the Pitkin-Monarch Pass and the Crested Butte-Somerset roads are in course of construction. Wagon roads traverse the main creeks, and the Forest is well supplied with trails which can be traveled with pack animals.

UNCOMPAHGRE NATIONAL FOREST

THE Uncompahgre National Forest is located in western Colorado, between the Gunnison and San Miguel Rivers. It comprises two main divisions separated by the valley of the Uncompahgre River, the westerly one including the greater part of the Uncompahgre Plateau, and the one to the east the north slopes of the San Juan Mountains. This latter unit of the Forest is known as the Ouray division.



Ouray, the starting point for trips into the Uncompahgre National Forest

The northern and eastern portions of the Forest drain into the Gunnison and Uncompahgre Rivers, while the southern part lies within the watershed of the San Miguel River. Within the Gunnison watershed is located one of the greatest Federal reclamation achievements in the West—the Uncompahgre irrigation project—whereby the waters of the Gunnison River are conducted by a tunnel 6 miles long, cut through a solid mountain of granite, to the Uncompahgre Valley. The water thus made available will irrigate 100,000 acres of fertile agricultural land that formerly was desert.

From a scenic and recreative standpoint, the summer visitor will find the Ouray country one of the most interesting in western Colorado. Because of its beautiful surroundings, Ouray, a town of 1,500 people on the Uncompahgre River at an elevation of 7,800 feet, is known as "The Gem of the Rockies." From the very edge of town massive, rugged mountains, with their forested slopes and varicolored cliffs of red, purple, lavender, and yellow, rise precipitously to a height of several thousand feet. To the east lies an immense natural amphitheater walled in by towering mountains, while to the west are Twin Peaks and Washington Monument, favorite scenic viewpoints for the tourist.

The summer climate, with its warm, sunshiny days and delightfully cool nights, is ideal for outdoor life. One may enter the Forest at almost any point with a pack outfit and find close at hand beautiful camping sites with good fishing and an abundance of pure water, fuel, and forage for live stock. Along Big Cimarron Creek and the Uncompahgre River many fine camp sites are accessible by wagon, but the most beautiful camping locations are only available to those who are willing to travel with a pack outfit and spend some time "roughing it" in the solitude of the mountains.

To the lover of wild life the mountains everywhere will be an unending source of pleasure and delight. The hunter who uses a camera will find many interesting things to "shoot," for deer are plentiful, and mountain sheep not uncommon on the higher and less frequented peaks and ridges. Elk also may be occasionally seen in the summer. Of the predatory animals common to the region, coyotes, bobcats, brown bear, lynx, and mountain lion may be mentioned. Bird life is abundant, and the ornithologist will find many interesting species in the more secluded parts of the hills.

It is almost impossible to travel in any direction from Ouray without climbing mountains. Numerous trails lead out from the wagon roads to all the sur-

rounding peaks, from the summits of which may be obtained panoramic views of mountain and plain. Uncompahgre Peak (14,306 feet), one of the highest mountains in the State, is close at hand, and from its rugged summit affords a view of distant Arizona, New Mexico, and Utah.

While Uncompahgre Peak is the most prominent of the Ouray country, there are many other noted peaks that will appeal to the mountain climber and challenge his best efforts. Within an air-line radius of 8 miles are such beacons of the Rockies as Wetterhorn Peak (14,020 feet), Coxcomb (13,663 feet), Matterhorn Peak (13,589 feet), Wildhorse Peak (13,271 feet), Sheep Mountain (13,180 feet), Courthouse Mountain (12,165 feet), and Chimney Peak (11,785 feet).

A splendid panorama unfolds from Vista Grande, on the west rim of the High Mesa, immediately overlooking the junction of the East and Middle Forks of the Big Cimarron. A more beautiful view of rugged, towering peaks, forested slopes, fertile valleys, and distant mountain ranges is rarely found even in the West.

Close to Ouray are beautiful canyons, tumbling cascades, medicinal springs, and other handiworks of nature which make for the pleasure and enjoyment of summer visitors. Chief of the near-by attractions is Box Canyon, which is half a mile long, 30 to 60 feet in width, and over 300 feet in depth. At the lower end of this gorge the waters of Canyon Creek fall 150 feet with a thunderous roar. Other interesting canyons are Uncompahgre, Dexter Creek, and Bear Creek. The most beautiful and noted cascades are Bear Creek Falls (253 feet high), Cascade Falls (350 feet high), Oak Creek Falls (150 feet high), Ruby Falls (200 feet high), and Bridal Veil Falls. All of these scenic attractions are within 2 miles of Ouray and are readily reached on horseback or on foot.

Ouray is the terminal of a branch line of the Denver & Rio Grande Railroad running south from Montrose, from which point connections may be made to all points east and west on the Rio Grande and connecting railroad systems. Connections may also be made at Ridgway for southern Colorado points along the Rio Grande Southern Railroad.

The Ouray country is reached by automobile over the "San Juan Highway" from Montrose on the "Rainbow Route." An auto road also connects Ouray with Silverton in the San Juan basin. This trip is made in half a day over one of the finest scenic roads in Colorado. A continuation of this road from Silverton south to Durango is now in course of construction.

COCHETOPA NATIONAL FOREST

THE Cochetopa National Forest lies in the mountainous country to the west and north of the San Luis Valley. The eastern portion drains southward into the Rio Grande del Norte, and the western portion includes the headwaters of many of the southern branches of the Gunnison River.

The Forest abounds in ideal sites for camping, which are accessible by wagon and automobile, and otherwise offers a fine opportunity for an outdoor vacation. Pure mountain water, wood for fuel, and forage for live stock are abundant, while many of the camp sites are close to excellent fishing streams. Supplies may be secured at near-by towns.

The many streams of the Cochetopa are well stocked with various native and eastern species of trout, and fishing is uniformly good throughout the summer months. Excellent catches have been made in the Saguache River, and in Cochetopa, Cebolla, Carnero, and Razor Creeks. The angler will also find many attractive fishing holes in the Tomichi River and its tributaries, and in Agate and Marshall Creeks.

Elk, deer, and mountain sheep are present in the Forest, but are located in widely scattered regions and are difficult of approach during the summer months. Deer are to be found on Long Branch Creek near Sargents, and also in the southeast portion of the Forest. Elk range on Saguache Creek, in the vicinity of Sheep Mountain, and mountain sheep are occasionally to be seen to the south of Table Mountain.

Among the interesting scenic features of the Cochetopa are the fantastic-shaped rocks on the Creed Trail, known as Twin Peaks; the Chimney Rocks, height 125 feet, on Los Pinos Creek; the canyon and falls on Saguache Creek, reached by trail; and Baldy Lake on the head of Long Branch Creek, which covers an area of 15 acres and is of unknown depth.

The mountain climber will find many interesting peaks on the Forest, from the summits of which he can obtain unexcelled views. Among the better known are Shavano Mountain (14,239 feet), San Luis Peak (14,149 feet), Mount Ouray (13,956 feet), and Mounts Aetna and Baldy. All these peaks may be reached on foot and horseback over good trails.

The Cochetopa Forest is crossed on the north by the Monarch Pass auto road from Salida to Gunnison, while the "Gunbarrel Road," so called because of its straightness, from Salida to Monte Vista skirts the eastern boundary.



Making camp on a pack trip in the National Forest. A Forest Service fire tool box can be seen under one of the trees on the right

Saguache, where the supervisor's headquarters is located, lies on the main "Rainbow Route" auto road from Salida via Poncha Pass. From this town one may make the trip to Parlin and points in the Gunnison Valley by the celebrated Cochetopa Pass auto highway built by the Forest Service. The Denver & Rio Grande Railroad traverses the northern portion, crossing the Continental Divide at Marshall Pass (elevation, 10,856 feet). Saguache may also be reached by auto stage from Moffat (18 miles) on the Salida-Alamosa branch of the Denver & Rio Grande Railroad.

SAN ISABEL NATIONAL FOREST

THE San Isabel National Forest includes three separate units: The Sangre de Cristo Range, the Greenhorn Mountains, and the Spanish Peaks, which almost encircle the Wet Mountain Valley and Huerfano Park. The entire Forest, with the exception of the west slope of the Sangre de Cristo, which drains into the Rio Grande del Norte, is within the watershed of the Arkansas River and its southwestern tributaries. The supervisor's headquarters is at Westcliffe in the Wet Mountain Valley.

The majestic grandeur and pure beauty of the mile upon mile of rugged, snow-capped peaks of the Sangre de Cristo is unequaled by any other mountain range in Colorado. To the east lie the rich, rolling meadows of the Wet Mountain Valley, with the pine and spruce covered slopes of the Greenhorn Mountains in the dreamy distance; to the west is the flat expanse of the San Luis Valley, with its innumerable lakes and checkerboard farms, while away to the south, silhouetted against the horizon, the symmetrical mass of the Spanish Peaks rises sharply above the golden mists of the valley.

Camping out is one of the most enjoyable ways to spend a vacation on the San Isabel. There are so many delightful places in the mountains that one has no trouble in choosing a location. All the important streams of the various divisions of the Forest offer suitable sites for summer camps, with a plentiful supply of pure mountain water, fuel wood, and forage for live stock close at hand. One may reach the higher and more secluded parts of the mountains either by wagon or with pack outfit. Food supplies and other camp necessities are readily obtained at near-by towns and ranches.

The many streams and lakes of the San Isabel are well stocked with trout, and excellent fishing may be found in any part of the Forest. Among the most noted fishing grounds within easy reach of Westcliffe are North and Middle Taylor, Sand, Colony, Grape, Macey, Swift, Texas, and Brush Creeks, Hermit Lake, and Lake of the Clouds. There are many other fine trout streams and lakes along the western slope of the Sangre de Cristo, and in the Greenhorn Mountain and Spanish Peaks country.

Wild game is plentiful throughout the Forest but is rarely seen in summer except at the higher altitudes. Deer, mountain sheep, black and brown bear, and mountain lions make up the wild life of the San Isabel. Wild turkeys are to be found around the Spanish Peaks, and the Forest Service has made "plants" of elk from the Yellowstone National Park in the vicinity of Beulah and Rye, in the Greenhorn Mountains. Antelope also range the Luis Maria Baca Grant in the San Luis Valley, and buffalo and other species of wild animals are to be seen within the game preserve of the Sangre de Cristo Grant.

To the mountain climber the San Isabel Forest offers unexcelled opportunities. The Sangre de Cristo Range, rising 6,000 feet above the valley to an elevation of 14,000 feet, forms a narrow ridge or sierra, scored by deep ravines walled in by steep cliffs several thousand feet in height. Its skyline, formed by

a series of pyramidal peaks, between which are some of jagged form with sharp columns projecting upward, is one of the most striking to be found in any range. Among the interesting peaks to be climbed are Sierra Blanca (14,390 feet), the third highest peak in Colorado, Crestone Peak (14,233 feet), Horns Peak (13,447 feet), Mount Humboldt (14,041 feet), Old Baldy (14,176 feet), and Rito Alto (12,989 feet). The Spanish Peaks, East (12,708 feet) and West (13,623 feet), and Greenhorn Mountain (12,230 feet), are also of interest because of the wonderful panoramic view obtained from their summits.

The Greenhorn Mountains may be entered from Pueblo on the east over excellent automobile highways to Rye and Beulah (25 and 35 miles, respectively), and from Florence and Canon City on the north by way of the Hardscrabble and Oak Creek auto roads. One of the finest automobile roads in the State, a part of the "Rainbow Route" which follows along the Arkansas River, skirts the northern boundary of the Forest from Canon City to Salida, with a branch road running southward from Cotopaxi to Westcliffe, which is the natural outfitting point for vacation trips to the eastern slope of the Sangre de Cristo. The western slope of this range is paralleled by the Salida-Alamosa branch of the Denver & Rio Grande Railroad and is readily accessible from Villa Grove, Moffat, and other points. Westcliffe may also be reached by rail over a branch line of the Rio Grande from Texas Creek.

The Spanish Peaks country can be reached by rail over the Pueblo-Alamosa branch of the Denver & Rio Grande Railroad or by automobile via the "Spanish Trail" from Walsenburg to Alamosa. The southern part of this division is also accessible from Trinidad.

MONTEZUMA NATIONAL FOREST

THE Montezuma is the most southwesterly National Forest in Colorado and takes its name from the celebrated Aztec ruler of Mexico. It is separated from the Uncompahgre and San Juan National Forests by the Ouray and La Plata Mountains, the northern and southern continuations of the San Miguel Range, which extends across the northeastern portion of the Forest. That part of the Forest lying to the north of the San Miguel Mountains is drained by the Rio San Miguel, while the southern and western portions are within the Rio Dolores and La Plata River watersheds.

Ideal camping sites are to be found along practically all of the important streams in the eastern part of the Montezuma Forest, West Mancos Creek and

Lost Canyon being especially attractive from an outing standpoint. Many beautiful locations in the mountains may be reached by team and wagon, but the less frequented sites are accessible only with saddle and pack horses. A number of fine camping spots, however, may be found within 20 miles of the railroad.

Those who are fond of fishing will find excellent sport in the streams of the Forest, noted for their fine trout. The most accessible waters are those of the East Dolores River, between Rico and Dolores, which is paralleled by the railroad for the entire distance. The many ranches along the river offer accommodations for fishermen. Bear Creek and the three forks of the Mancos River are also good fishing streams.

There are also numerous lakes in which the angler will desire to test his skill. Among those of special interest are Woods Lake at the foot of Dolores Peak, and Navajo Lake, a picturesque body of water covering 30 acres near timberline. Both these lakes contain large quantities of good-sized trout, which are very wary and afford keen sport.

Wild game, with the exception of predatory animals such as mountain lions, wolves, lynx, and bear, is not very abundant in the Forest. Deer are widely distributed, but may frequently be observed during the summer. Mountain sheep are largely confined to the high country in the San Miguel and Ouray Mountains, while elk are occasionally seen in the southeast portion.

The mountain climber will find the Telluride division of the Montezuma of special interest. The highest peak in this vicinity, and also on the Forest, is Mount Wilson, rising to a height of 14,250 feet. Its summit offers a difficult and in part a dangerous climb, but affords one of the most beautiful views obtainable in the southern part of the State. The sheer rock face of Lizard Head Peak (13,156 feet) near by, has never yet been climbed by man. Lone Cone Mountain, (12,761 feet), because of its isolated location, also offers a very attractive outlook. Hesperus Mountain (13,225 feet), the highest peak in the Mancos district, is accessible by wagon to within 4 miles of the top.

For those wishing to enjoy rugged mountain scenery with a minimum of effort, the High Line trail is recommended. This trip is made from Rico up the Dolores River and Coal Creek to the Meadows, thence by trail over the crest of the ridge, and back to Rico either by way of Horse Creek or Burnett Gulch. The highest point on the trail is the summit of Sockrider Mountain, 12,230 feet. The round trip from Rico can easily be made in a day's ride.



Near the "top of the world." Wind-blown spruce at timberline in the Cochetopa National Forest

From Mancos, where the headquarters of the Forest is located, it is an easy 25-mile run by automobile to the Mesa Verde National Park, where are found the ruined habitations of the ancient "Cliff Dwellers," built into niches and beneath overhanging ledges in the canyons of the Mesa Verde.

The Montezuma Forest may be entered from the north or east over the Ridgeway-Durango division of the Rio Grande Southern Railroad. The southern portion is accessible by automobile as far as Mancos and Dolores over the "Spanish Trail" from Alamosa via Pagosa Springs and Durango. Good wagon roads also follow many of the streams, but travel in the higher country is limited to trails.

DURANGO NATIONAL FOREST

THE Durango National Forest lies in the rough, mountainous country on the west side of the Continental Divide in southwestern Colorado, adjoining a vast semiarid region to the south, which extends far into New Mexico. It embraces what is known as the San Juan Basin, which is hemmed in on the east, north, and west by high, rough mountain ranges and is drained by the Animas River and other tributaries of the San Juan River.

Visitors to the Forest will find accommodations at reasonable rates, conveyances of all kinds, and every opportunity for outing trips in the mountains, at Durango, Silverton, Trimble Springs, and many of the smaller towns. Limited accommodations for short periods may also be had at the camps in the various mining districts of the region.

Delightful camping sites abound along the streams and around the lakes of the Forest. Many of these may be reached by a short wagon journey from the principal towns and outfitting points, while pleasure seekers who may wish to penetrate the more beautiful and remote parts of the mountains will find travel made easy by a system of well-built trails. Among the most desirable and accessible sites are Hermosa Creek and Park, Pine River, Needle, Vallecito, Elk, and Junction Creeks, and Rock, Henderson, and Hamor Lakes.

In the Forest are many fine trout streams, having a combined length of over 160 miles, which are regularly stocked with fry from Federal and State hatcheries. Hermosa Creek is one of the best fishing streams in the State, and is within easy reach of Durango. Vallecito and Pine Creeks are also readily accessible and afford fine sport, while at greater distances from the beaten routes of travel are the well-stocked waters of the Florida River and South Mineral and Lime Creeks. Of the large bodies of water, Electra and Emerald Lakes hold first place in the estimation of anglers. There are also many other lakes in the more distant and rougher parts of the mountains noted for the quantity, size, and gameness of the fish they contain. To reach these choice waters, however, one must travel with a pack outfit and be prepared to "rough it."

Wild game is plentiful on the Durango, and it is not an uncommon thing in summer to run upon elk, deer, and bear along the various streams. Deer and elk are often observed from the railroad in Animas Canyon. Mountain sheep are found in considerable numbers between Vallecito and Pine Rivers.

La Plata, San Juan, and Needle Mountain Ranges, with their gorgeous coloring, rugged peaks, and precipitous canyons, present many unique scenic attractions. Of particular interest are the sharp red granite promontories of the Needle Mountains, which include such eminences as Windom Mountain (14,084 feet), Sunlight Peak (14,084 feet), Mount Eolus (14,079 feet), Pidgeon Peak (13,961 feet), and Turret Peak (13,819 feet). In the near-by Grenadier Range are Vestal (13,846 feet), Trinity (13,804 feet), Arrow (13,803 feet), Electric (11,943 feet), and many other noted scenic peaks. The mountains surrounding Silverton, particularly Kendall (13,480 feet), Tower (13,444 feet), Sultan (13,336 feet), and King Solo-

mon (13,550 feet) Mountains are exceedingly rugged and picturesque. At the top of King Solomon is located the North Star mine, said to be the highest mine in the United States. The round trip from Silverton to the summit of any of these mountains may be made in a day.

The headquarters of the Forest is located at Durango, which is reached from the east and south by the Denver & Rio Grande Railroad from Alamosa and Farmington, N. Mex., and from the west and north by the Rio Grande Southern Railroad. The "Spanish Trail" automobile highway from Alamosa skirts the southern part of the Forest, touching Durango and continuing west to Mancos. There are also very good automobile connections to the south and west by way of Gallup and Santa Fe, N. Mex. The Silverton district, in the northern part of the Forest, is accessible to machines by way of the "San Juan Highway" and Ouray from Montrose on the "Rainbow Route." An auto road connecting Durango and Silverton is now being built by the Government up the Animas River Valley. When completed, this route will afford one of the most spectacular mountain trips in Colorado. Many of the roads within the Forest are passable for short distances by automobiles, but the usual means of travel is by team and wagon. The high mountainous country, which is covered with a network of trails extending from the terminals of the wagon and automobile roads, is accessible only by horse and pack outfits.

RIO GRANDE NATIONAL FOREST

THE Rio Grande National Forest lies in southwestern Colorado, to the north and east of the San Juan Mountains, in Hinsdale, Mineral, Rio Grande, and Conejos Counties. It is bounded on the north by the Continental Divide, and includes the watershed of the Rio Grande del Norte and its western tributaries, from which river the Forest takes its name.

Outdoor life is best enjoyed in a tent pitched in a grove of towering spruce near some tumbling mountain stream wherein the wily trout finds a home. Such ideal camping spots may be found on the Forest along the Rio Grande del Norte, and the Alamosa and Conejos Rivers and their many tributaries. Many of these camp sites are on automobile or wagon roads, but the more remote parts of the mountains can only be traveled with a pack outfit.

The Continental Divide Trail, which follows the crest of the backbone of America for 50 miles westward from Treasure Pass on the "Spanish Trail," offers one of the most spectacular trips in the Rockies. The view of southern Colorado,



Tourists viewing the Wheeler National Monument, Rio Grande National Forest

Utah, and New Mexico, seen from this trail, is like a motion picture of magnificent mountains, valleys, and streams shown from a thousand angles in all their varied colors, lights, and shades. Visitors intending to take this skyline journey should equip themselves with good saddle horses and a complete pack outfit.

There are several hundred miles of excellent fishing streams within the Rio Grande, well stocked with eastern brook and rainbow trout. The best waters are those of Clear Creek and its various tributaries, Rio Conejos, and Los Pinos, Alberta, and Squaw Creeks, and the upper reaches of the Rio Grande del Norte. All these streams are readily accessible, and are visited by large numbers of fishermen each season. In the more distant parts of the Forest good angling is to be had in South Elk, Park, La Garita, and Embargo Creeks.

Visitors to the Forest may secure accommodations at Monte Vista, Del Norte, Wagon Wheel Gap, Creede, Antonito, and other smaller towns. A number of ranches which cater to the tourist trade during the summer months can be reached by automobile and wagon from Creede, Antonito, and South Fork.

Deer is the most abundant game animal in this country, and may be frequently observed among the willows along fishing streams. Elk, of which there are about 250 on the Forest, range along the eastern slopes of the San Juan Mountains in the vicinity of Goose Creek and South Fork. Mountain sheep may also occasionally be observed on Pole Mountain.

There are numerous waterfalls on the Rio Grande, all accessible by wagon, which are well worth a visit. Among the most beautiful are the North and South Clear Creek Falls, Red Mountain Falls, and Conejos Falls, all of which are from 75 to 80 feet in height and carry a considerable volume of water. From a scenic standpoint, the Rio Grande and Willow Creek Canyons and the Wheeler National Monument—a grotesquely eroded lava formation—are of particular interest. The Wheeler National Monument can be reached by horseback over good trails from either Creede or Wagon Wheel Gap.

In the high ranges of the Rio Grande are many peaks which afford an unsurpassed view of the mountains, forests, and plains of southwestern Colorado. Of the better known peaks which may be reached by wagon and horseback are River Peak (13,145 feet), San Luis Peak (14,149 feet), Del Norte Peak (12,378 feet), and Bennett Peak. More difficult of ascent are Pole Mountain (13,740 feet) and Rio Grande Pyramid (13,830 feet), the latter having the distinction of appearing the same from any point of view.

The northern part of the Forest is traversed by the Denver & Rio Grande Railroad, following the Rio Grande from Alamosa to Creede, while the southern boundary is skirted by the Antonito-Pagosa Springs division of the same line.

The "Spanish Trail" from Alamosa and other eastern points to Durango follows up the Rio Grande del Norte to South Fork, and thence crosses through the heart of the Forest via Wolf Creek Pass to Pagosa Springs. A branch road from Creede and Wagon Wheel Gap connects with this highway at South Fork. Good wagon roads and trails are also to be found throughout the mountains.

SAN JUAN NATIONAL FOREST

THE San Juan National Forest is located in southwestern Colorado, between the Rio Grande and Durango National Forests. It is bounded on the north and east by the Continental Divide and Navajo River, and on the west by rugged mountain ranges. From the summit of the Divide the surface of the Forest drops off to the south, first abruptly, then more gradually, finally ending in a long, gentle slope toward the New Mexico line. The entire drainage system lies within the watershed of the San Juan River, from which the Forest takes its name.

There are many delightful camping sites on the Forest, with good fishing in near-by streams. Wood, water, and forage for stock are plentiful. The more distant camp grounds are approached only by trail, but there are many good locations, especially along the West Fork of the San Juan River and the upper Rio Piedra country, which may be reached by automobile or wagon. Weminuche



Automobile camping is a popular way of spending a vacation in the National Forests, the owner of the machine shown in the picture has come from Nebraska to enjoy life in Colorado's National Forests

and Williams Creeks, West and East Forks of the San Juan River, and Big Navajo River are all noted camping grounds.

Good fishing is to be had in the upper reaches of the San Juan and Piedra Rivers and their numerous tributaries, which are kept well stocked with trout. The best fishing waters are Weminuche, Sand, Williams, Four Mile, Turkey, Blanco, and Fish Creeks, the Piedra River and the East and West Forks of the San Juan River. In addition, there are numerous lakes in the higher, more inaccessible parts of the mountains which are well stocked with game fish.

Wild game is not plentiful on the San Juan, but may occasionally be observed in the summer time in the more remote portions of the Forest. Some 60 head of elk inhabit the Sheep Horn game refuge, while mountain sheep are to be found in a few of the higher ranges. Among the wild life found on the Forest are black-tailed or mule deer, black, brown, and silver-tip bear, mountain lions, wolves, and bobcats.

A number of peaks in the Forest offer exceptionally fine views to the climber who is able to reach their summits. The more important are Summit Peak (13,323 feet), Pagosa Peak (12,674 feet), and Treasure Mountain (13,200 feet). This latter peak takes its name from an old legend that a rich treasure was buried on the mountain near three spruce trees marked with mule shoes. No one, however, has ever been able to locate this buried store of gold. The trees with the old mule shoes blazed upon them can be seen close to the top of the mountain.

At Pagosa Springs, where the headquarters of the San Juan Forest is located, are the celebrated "pagosa" or "healing waters" of the Ute Indians. These are sulphur and mineral springs, and are said to be among the best found on the American Continent. Excellent accommodations are available in this town, which is the natural outfitting point for trips into the mountains.

Pagosa Springs is reached by rail over a branch line of the Denver & Rio Grande Railroad running from Pagosa Junction on the Antonito-Durango division. The "Spanish Trail" automobile highway from Alamosa and the east traverses the center of the Forest, crossing the Continental Divide from South Fork via Wolf Creek Pass, following down the San Juan River to Pagosa Springs, and continuing westward to Durango and Mancos. The Wolf Creek Pass trip, a part of this route, is one of the most picturesque in southern Colorado. Auto roads also follow some of the principal streams of the Forest, but the high country is accessible only by wagon or with a pack outfit.

TREE ZONES OF COLORADO

Mt. Massive - 14,402 ft. - Mt. Elbert

ALPINE MEADOWS

No trees: extensive rocky areas; expansive grassy meadows with flowers of brilliant color and unusual form: willows of small size.

Timber line, 11,000-12,000 ft.

ENGELMANN SPRUCE BELT

Dense dark forests of spruce, usually with alpine fir (balsam) in mixture: limber or bristlecone pine in exposed places, especially near timber line: aspen on burns, temporary. Animals and flowers rare in the forest.

9,500 ft.

DOUGLAS FIR BELT

Thick Douglas fir forests on northerly slopes, yellow pine on warmer situations: Engelmann and blue spruces along streams: aspen: lodgepole pine may replace these species in northern Colorado and on western slopes north of Gunnison River. Burns numerous.

8,000 ft

YELLOW PINE BELT

Open forests of yellow pine with some Douglas fir on moist slopes, and Colorado blue spruce and silver fir along streams: birch, maple, alder and Cottonwood line stream banks: kinnikinnik, with scarlet berries, usually in pine forests.

Manitou 6,500 ft.

WOODLAND BELT - FOOTHILLS

Scattered growth of low, bushy trees like pinon and juniper or extensive areas of scrub oak, mountain mahogany, sumac, sage brush and other shrubs: numerous attractive flowers, such as wind-flower, yucca and goldenrod.

PRAIRIE

Denver 5,000 ft.

TREE ZONES OF COLORADO

THE forests of Colorado are mainly coniferous; that is, made up of cone-bearing or evergreen trees. Chief among the commercial timber trees are yellow pine, lodgepole pine, Douglas fir, Engelmann spruce, and blue spruce. Hardwoods that one meets with at the lower elevations are cottonwood, birch, maple, alder, and scrub oak. It is this last species which makes green so much of the foothill country. Higher up, especially on areas burned over years ago, quaking aspen, with its white bark and silver-green leaves, grows ghostlike among the dark green of the conifers.

According to elevation and its corresponding climate the Colorado mountains exhibit four zones of tree growth: The woodland belt, between 5,000 and 6,500 feet; the yellow-pine belt, between 6,500 and 8,000 feet; the Douglas-fir belt, between 8,000 and 9,500 feet; the Engelmann-spruce belt, between 9,500 and 11,500 feet. These belts are shown graphically in the diagram on page forty-eight. The bulk of the commercial timber is found in the yellow-pine and Douglas-fir belts. Above 10,000 feet conditions for tree growth steadily grow more severe, until at about 11,500 feet timberline is reached. While above this altitude there are no trees, the visitor in the summer months will find a great variety of brilliantly colored wild flowers. Wild flowers are, in fact, one of the most distinctive attractions of the Colorado mountains, and visitors in the National Forests will find them in great profusion. Those who take a special interest in flowers would do well, before going into the mountains, to obtain some book which describes and illustrates the different kinds.



Rocky cliff, towering timber, and boulder-strewn stream make such beauty spots as this in the National Forests

HOW THE NATIONAL FORESTS ARE ADMINISTERED

EACH National Forest is in charge of a supervisor, with headquarters at some near-by town. This is one place where visitors can always obtain information about the Forest and where they can leave their names and addresses before going into it. Every Forest, furthermore, is divided into ranger districts, with a ranger in charge of each. Ranger headquarters are right in the Forests, and can always be told by the United States flag which flies from a tall pole in front of them. Rangers are always glad to give information and assistance to the traveler, and visitors who plan to stay in a Forest any length of time would do well to notify the nearest ranger, in addition to the supervisor.

The ripe timber on the Forests, that is, timber that has practically reached its full growth, is for sale to the highest bidder. A good deal of it is in places too inaccessible and too remote to justify its being lumbered under present conditions; but the visitor, in the course of his ramblings through the mountains, may come upon an area where lumbering is going on. The lumbering is done by the purchaser, but the timber to be cut is first marked by a Forest officer in accordance with forestry practice. All the young and thrifty trees are left standing, to furnish the basis for another timber crop later on and to protect the ground. Incidentally, the esthetic beauty of the Forest is preserved at the same time; for no bare or unsightly slopes mar the landscape after lumbering on the National Forests, as they often do after lumbering on privately owned lands. What barren areas are encountered on the National Forests are mainly the result of cutting or fire, more often both, before the Forests were created, when it was nobody's business to see that the public timber was protected and rightly used. Of course, fire sometimes gets a start in a Forest even now, very often from a camp fire left burning or a lighted match carelessly tossed away; but usually it is put out before it does much damage. The bare areas, moreover, are being planted to young trees as fast as funds will permit. The visitor to the mountains of Colorado will find, especially on the Pike Forest, a number of examples of this work.

Along with the timber on the Forest are large areas of grazing land. These are used by cattle and sheep, mainly the property of local settlers and stockmen. Preference is always given the local men in the use of the range. Every owner who grazes stock on the Forests, except the man who has only a few domestic cattle, pays a fee of so much for each head, and has a certain portion of the range allotted for his exclusive use during the grazing season. This arrangement is in place of the warfare that, prior to the creation of the Forests, was waged between

cattlemen and sheepmen for possession of the open range. As recently as 1902, on what is now the Bridger National Forest, in Wyoming, some 9,000 sheep in a single band were killed by cattlemen as a warning to sheepmen to keep out of the country. Conditions in Colorado were as bad if not worse, and human lives, as well as stock, were lost in the range battles.

Fire is an ever-present menace in the National Forests, and the Forest Service has built up a fire-protective system which makes it possible to put out most fires before they do any real damage. Lookout stations, connected by telephone with the headquarters of the nearest ranger, with other lookout stations, and with the headquarters of the supervisor are located on high points, which command wide views of the surrounding country. Here, during seasons of special danger, an observer is stationed whose business it is to report at once to the proper officer any fire that he may discover, and its location. A visit to the lookout station is well worth the effort, for the view to be obtained is usually the best in the region, and the method by which the observer locates a smoke with his "fire finder" gives one an insight into scientific fire-detection methods. The life of an observer is at best a lonely one, and visitors are always welcome.

Once a fire is reported, it is the business of the district ranger to put it out, if he can do this, with the help at hand. If the fire is too large for him to handle the supervisor is called upon to get together a force sufficient to handle it. Every fire which starts on the National Forests is fought until it is extinguished, no matter how long this takes or how many men are required to do it. The basic idea of the National Forest fire protective system, however, is to discover and extinguish fires while they are small, rather than fight them when they are large. The lookout stations are supplemented during the fire season by a system of patrol, and fire-fighting tools and other equipment are stored at convenient points in the Forest. The visitor in the National Forests who discovers a fire should report it at once to the nearest Forest officer. Minutes count.

Just as important as the protection of National Forest resources is the work of opening up the Forests and making them more accessible. Since 1905, when it assumed the administration of the National Forests, the Forest Service has built or repaired about 2,000 miles of road and about 25,000 miles of trail. These serve the purpose of fire protection by making it possible to transport men and material quickly to the localities where fires occur, give the population within the Forests an outlet to the rest of the world, and enable the people of the country in general to get into the Forests. Road building has been done mainly with a fund

equivalent to 10 per cent of the gross receipts of the Forests, appropriated by Congress for the work. In 1916, however, Congress made a special appropriation of \$10,000,000 for National Forest roads, to be spent a million dollars a year for 10 years. This sum really represents but half, and perhaps less than half, of the amount of money which will probably be available for road building in that period, for Congress further provided that an equal amount shall be contributed by the States and counties concerned. Thus, the sum of \$20,000,000, plus 10 per cent of the yearly receipts from the Forests, will be spent between now and 1927 in opening up the Forests for the benefit of those who live in or near them and for the vast number of other Americans who may wish to use them as recreation grounds.

As fast as funds are available, National Forest roads and trails are being posted with signs to guide the visitor. These bear, in addition to the lettering, a shield, in the middle of which is a pine tree and the letters "U S," with the words "Forest Service" above and "Department of Agriculture" beneath it. In design, this shield is a reproduction of the badge worn by rangers and other Forest officers, by which they can be identified.



Here one may camp and fish to his heart's content. Lower Marvine Lake, White River National Forest

FIRE PREVENTION AND CAMP SANITATION

COLORADO depends upon the National Forests for water with which to irrigate her farms and orchards, to generate electric power for her industries, and to supply the domestic needs of her towns and cities. Destruction of the forest cover on the watersheds of the streams would be a calamity for the State in the effect that it would have upon the water supply and in the loss of immensely valuable timber. Care with fire by those who use the National Forests will go a long way toward preventing damage to the forest cover. Carelessness, on the other hand, may result in an immense property loss and the sacrifice of human lives. A lighted match tossed into the underbrush, a camp fire left burning, or a cigar or cigarette thrown away without being extinguished may start a conflagration that will destroy in an hour what it has taken nature hundreds of years to create, and will at the same time affect the prosperity of an entire region. Compliance with the six rules which follow will lessen greatly the chance of a fire starting from such preventable causes. Most of the rules have been enacted into law, with severe penalties for their violation.

1. MATCHES.—Snap your match in two. Be sure it is out before you throw it away.
2. TOBACCO.—Throw pipe ashes and cigar or cigarette butts in the dust of the road and stamp out the fire before leaving them. Don't throw them into brush, leaves, or needles.
3. MAKING CAMP.—Build a small camp fire in the open, not against a tree or log or near brush. Scrape away the needles and trash from all around the fire.
4. BREAKING CAMP.—Never leave camp without quenching your fire with water and then covering it with earth. Be sure it is out.
5. BONFIRES.—Never build bonfires in windy weather or where there is the slightest danger of their escaping from control. Don't make them larger than you need.
6. FIGHTING FIRES.—If you find a fire, try to put it out. If you can't, get to a telephone or telegraph and notify the nearest United States forest ranger or State fire warden at once. Keep in touch with the rangers of the Forest you are visiting.

The matter of camp sanitation is very important in the mountains, for almost every stream by which the camper pitches his tent supplies domestic water to the people of the cities and towns of the State.

The best way to dispose of kitchen refuse is to burn it in the camp fire. Burn everything—parings, bones, meat, coffee grounds, and even old tin cans—for if thrown out they may attract flies. Refuse once burned will not attract flies. If burning is impracticable, dig a hole for the refuse, and cover each addition with a layer of fresh earth.

Latrines should be located several hundred feet from running water.

CAMPING OUTFIT

PERSONAL EQUIPMENT

In selecting camp equipment, persons preparing to visit the National Forests of Colorado should find the following suggestions useful:

CLOTHING

- Old business suit; or corduroy, khaki, or overall material.
- Sweater or mackinaw.
- Underwear, medium weight.
- Socks, wool, medium weight, two pairs being worn; or one pair heavy.
- Shirt, flannel or khaki, medium weight, half size larger than usually worn.
- Shoes, stout, easy on feet, with soles heavy enough for Hungarian nails; "sneakers" or moccasins for camp.
- Leggings, canvas or leather; woolen puttees in snow.
- Boots, hunting, with bellows tongue, 14 inches or over in height, instead of shoes and leggings, if desired.
- Gloves, buckskin, without cuffs.
- Hat, moderately wide brim, felt or cloth.

BEDS

Air mattresses are the most comfortable beds for the mountains, since they can be placed even on bare rocks. The objection to them is their weight, and that they are cold to sleep on at high altitudes. Mattresses are usually too bulky except where the camp trip is made with team and wagon. In the spruce and fir forests a comfortable bed can be made from boughs by laying sprays about 18 to 24 inches long overlapping in courses, the big ends of each course being covered by the small ends of the next course.

BEDDING

The most serviceable bedding is an eiderdown quilt, with an extra covering of denim, and two light wool blankets. The quilt can be pinned with blanket pins along the bottom and side to form a sleeping bag. Wool quilts are also serviceable, but are not as warm as eiderdown. A 7 by 7 foot, 10-ounce canvas will make an excellent ground cloth and an extra cover, and is also useful as a pack cover.

CAMP EQUIPMENT

Camp equipment used by the Forest Service in outfitting fire crews is shown in the following list. An outfit for five men is given:

Knives, table	7	Stew kettles, half-gallon	2
Forks, table	7	Meat fork	1
Teaspoons	7	Canvas water pail, 2-gallon	1
Spoon, stirring	1	Butcher knives	2
Plates	7	Stewpans, assorted	2
Cups	7	Can opener	1
Milk pan (dish up)	1	1-gallon coffeepot	1
Dish pan	1	Dutch oven	1
Fry pans, small	3	Lantern	1



In the less traveled portions of the National Forests food and lodging can often be had at ranch houses like that shown in the left foreground

To the foregoing may be added:

Washbasins.

Oilcloth for table.

Pepper and salt boxes.

Miscellaneous camp equipment:

Shovel.

Hatchets.

6-inch files.

Axes and extra handles.

Assorted nails.

Whetstone.

Saw.

Canteens.

Rope and twine.

RATIONS

The following ration list is used by the Forest Service in Colorado as a guide in subsisting fire fighters on the fire line and may be of service to campers in outfitting for camping trips. The list shows the amounts of various articles required to subsist 10 men for one day. The requirements of one man for 10 days will be approximately the same, and supplies for any number may be computed from the figures given:

Forest Service fire crew ration list—10 men, 1 day.

Meat:

Fresh meat or.....	pounds..	10
Canned or cured meats.....	do....	7½

Bread or flour:

Bread or.....	pound loaves..	9
Flour.....	pounds..	10

Baking powder (if above amount of flour is used).....	do....	⅓
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Lard.....	do....	1
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Sugar.....	do....	4
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Sirup.....	pints..	1
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Coffee, ground.....	pounds..	2
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Tea.....	do....	¼
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Milk, canned.....	1-pound cans..	3
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Butter.....	pounds..	2
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Fruits:

Dried or.....	do....	2
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Canned.....	quarts..	3
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Rice.....	pounds..	1
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Beans.....	do....	2
------------	--------	---

Potatoes.....	do....	10
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Onions.....	do....	1
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Tomatoes, canned.....	large cans..	3
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Macaroni.....	pounds..	½
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Cheese (American).....	do....	1
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Pickles.....	quarts..	½
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Salt.....	pounds..	½
-----------	----------	---

Pepper.....	ounces..	2
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Baking soda.....	ounces..	2
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Yeast.....	cakes..	2
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Cocoa.....	pounds..	1/5
------------	----------	-----

Raisins.....	do....	½
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Rolled oats.....	do....	1
------------------	--------	---

Corn, canned.....	cans..	2
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Peas, canned.....	do....	1
-------------------	--------	---

Soda.....	pounds..	1/10
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Dish towels (cheesecloth).....	yards..	3
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Twine.....	balls..	1
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Hand towels.....	number..	3
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Candles.....	do....	3
--------------	--------	---

Soap (hand, Sapolio, and laundry).....	bars..	3
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Matches.....	boxes..	1
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Food bags, waterproof.....	number..	6
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Chloride of lime.....	pounds..	½
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Total weight, about 85 pounds.

PHOTOGRAPHIC EXPOSURE GUIDE FOR COLORADO

FOR USE WITH ORDINARY FILMS OR FILM PACKS, AND STOP F/8 OR U. S. 4. EXPOSURE IN SECONDS OR FRACTIONS OF A SECOND

Calculated to give full shadow details at altitudes from 5,000 to 8,000 feet. Correct exposure for average landscapes with light foreground, and views with figures or animals in the middle distance; also river scenes, light-colored buildings, monuments, and snow scenes with trees in foreground. For altitudes from 8,000 to 12,000 feet and over, use exposure given in table with the next smallest stop, i. e., F/11, or U. S. 8.

Hour	Month and weather											
	January, November, and December			February and October			March, April, August, and September			May, June, and July		
	Bright	Hazy	Dull	Bright	Hazy	Dull	Bright	Hazy	Dull	Bright	Hazy	Dull
11 a. m. to 1 p. m.	$\frac{1}{75}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{75}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{75}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{50}$	$\frac{1}{25}$
10 a. m. and 2 p. m.	$\frac{1}{50}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{50}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{75}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{50}$	$\frac{1}{25}$
9 a. m. and 3 p. m.	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{50}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{50}$	$\frac{1}{25}$
8 a. m. and 4 p. m. ....	.....	.....	.....	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{2}$	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{75}$	$\frac{1}{25}$	$\frac{1}{10}$
7 a. m. and 5 p. m. ....	.....	.....	.....	.....	.....	.....	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{2}$	$\frac{1}{50}$	$\frac{1}{25}$	$\frac{1}{10}$
6 a. m. and 6 p. m. ....	.....	.....	.....	.....	.....	.....	$\frac{1}{5}$	$\frac{1}{2}$	1	$\frac{1}{25}$	$\frac{1}{10}$	$\frac{1}{5}$
5 a. m. and 7 p. m. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{2}$

NOTE.—For exposures $\frac{1}{10}$ of a second or longer, camera should be used on a tripod, or rested on a firm support.

- Strength of light:
- Bright: Sun shining out of a clear sky.
 - Hazy: Faint shadows of objects cast by sun.
 - Dull: No shadows cast by sun.

Stops:

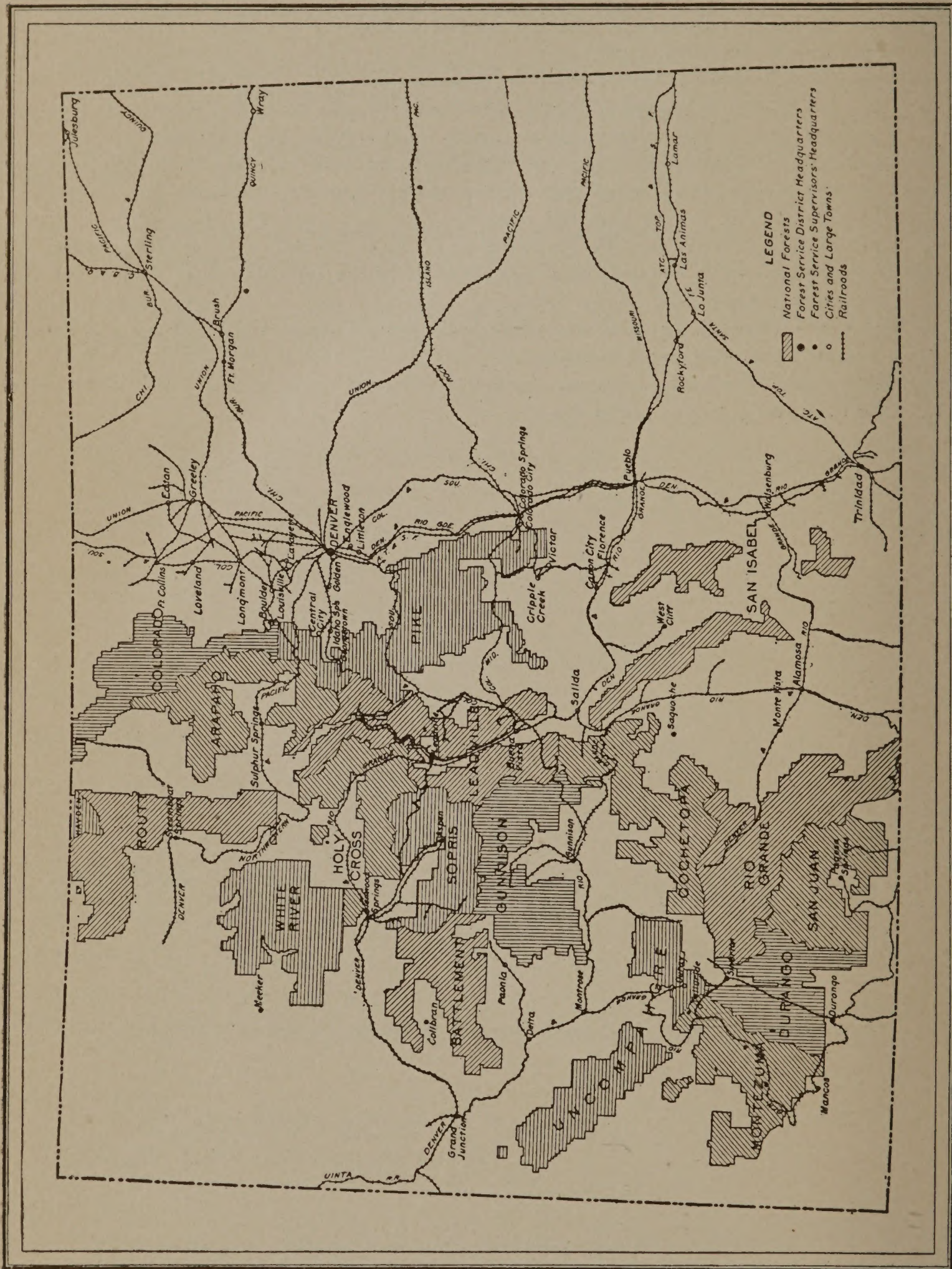
For stops other than F/8, or U. S. 4, multiply the exposure given in table by the number in the third column.

U. S. 16	F/16	× 4
U. S. 32	F/22	× 8
U. S. 64	F/32	× 16

Subjects:

For subjects other than those mentioned, multiply the exposure shown in the table by the number given below for the class of subject:

- $\frac{1}{8}$ *Studies of sky and white clouds.*
- $\frac{1}{4}$ *Open views of lakes and sky; very distant landscapes; sunset and sunrise scenes.*
- $\frac{1}{2}$ *Open landscapes without foreground; open streets, roads, or fields; very light colored objects, snow scenes with no dark objects; wooded hills not far distant.*
- 2 *Landscapes with medium foreground; landscapes in haze or mist; buildings showing both sunny and shady sides; well lighted street scenes; persons, animals, and moving objects at least 30 feet from the camera.*
- 4 *Landscapes with heavy foreground; buildings or trees occupying most of the picture; brook scenes with heavy foliage; red-brick buildings and other dark objects; groups outdoors in the shade.*
- 8 *Portraits outdoors in the shade; very dark, near objects which nearly fill the plate, and where full shadow detail is required.*
- 16-24 *Badly lighted river banks; canyons, ravines.*
- 16-24 *Wood interiors not open to the sky.*



The National Forests in Colorado and principal towns and railroads.

